



Professional Grade 300B Double Twist Bunching Machine with 2 Year Warranty!

The quality of our **300B Double Twist Bunching Machine** is second to none. Can do conductor stranding from 0.0088mm² to 0.45mm². products are widely used in **IT communications, aerospace, military, medical, locomotives, automobiles, robots, ships, 5G cloud databases and other fields**

300B Double Twist Bunching Machine apply for the bunching of aerospace, medical instrument, cellphone, notebook PC and ultra fine conductor (above seven pcs of alloy wires, tinned wires, silver jacketed wires and enamelled wires.

Merits:

1. **300B Double Twist Bunching Machine** is High speed, constant tension from empty reel to full reel, excellent quality of stranded wire, which can be used for stranding instead of stranding to meet customer's requirements for stranding of small cross-sectional area. The whole machine is driven by a synchronous belt, and only the take-up wheel needs to be replaced when changing the lay length, easy to use

2. IoT (optional): **300B Double Twist Bunching Machine** information of multiple devices can be integrated on multiple mobile phones or computers, and the operation of the machine can be checked at any time, such as speed, stranding specifications, line speed, output, equipment maintenance, etc., and can be online at the same time Diagnosis and remote maintenance, etc., to achieve refined management and reduce production and maintenance costs.



This **300B Double Twist Bunching Machine** is CE approved

3. Can fit 380V to 440V, 50HZ to 60HZ, color can be customize

3 phase 4 wires, R, S, T, PEN

3 phase 5 wires, R, S, T, PE, N

4. Type:

300B Double Twist Bunching Machine for single wire 0.05-0.28mm stranding, cross section 0.0137-0.45mm², pitch range 1.6-21.6mm for conductor (please refer to page 5-10)

300B Double Twist Bunching Machine for single wire 0.03-0.18mm stranding, cross section 0.0049-0.3mm², pitch range 8-39.5mm (please refer to page 11-16)



5. Some option:

Set-up:

China standard: Veinview HMI + Inovance PLC & Invertor + Siemens Motor

Siemens standard: Siemens HMI & PLC & Invertor+Siemens Motor





Spindle lubrication: manual lubrication / PLC lubricator



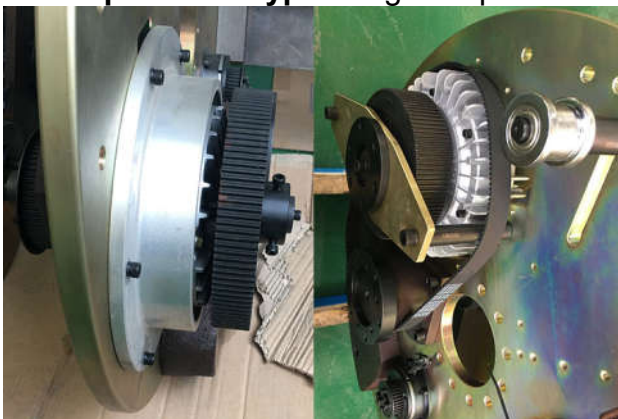
Power Cabinet: Embedded type / plug in type / Stand alone type / Synoptic panel type



Spool Lift: manual hydraulic pump / electrical hydraulic pump



Take-up tension type: Magnetic powder clutch / Hollow shaft clutch



IOT remote system and temperature sensor



状态	名称	数值	地址	数据类型	描述	操作
<input type="checkbox"/>	主机转速		VD 1060	速度	主机转速	
<input type="checkbox"/>	当前米数		VD 330	位置	当前米数	
<input type="checkbox"/>	当前张力		VW 5000	位置	当前张力	
<input type="checkbox"/>	当前线速		VD 1190	速度	当前线速	
<input type="checkbox"/>	节能设定	<input checked="" type="checkbox"/>	VD 170	位置	节能设定	
<input type="checkbox"/>	设置米数	<input checked="" type="checkbox"/>	VD 740	位置	设置米数	
<input type="checkbox"/>	设定张力	<input checked="" type="checkbox"/>	VW 360	位置	设定张力	
<input type="checkbox"/>	排距设定	<input checked="" type="checkbox"/>	VW 1420	位置	排距设定	
<input type="checkbox"/>	左轴1#温度		VD 3230	位置	左轴1#温度	
<input type="checkbox"/>	左轴2#温度		VD 3250	位置	左轴2#温度	
<input type="checkbox"/>	右轴3#温度		VD 3270	位置	右轴3#温度	

Pay terms: T/T, L/C.

Package:

- 1) Simple water-prof package
- 2) Pallet package
- 3) Pallet with Vacuum package
- 4) Wooden box package





300B Double Twist Bunching Machine specification

➤ **Merits:**

- 1.High speed and good stability The motor is directly connected to the drive shaft through a rigid coupling).
- 2.Automatic tension control: During stranding, the taking up tension should be increasing from empty to full,(Data set by touch screen) The machine can automatically monitor and adjust the tension smoothly, keep the tension uniform variation ,Can achieve tension setting while working .
- 3.Wiring system: Use the latest structure, the stranded conductor from the spindle wheel directly to the flyer bow, (with) a unique semi-circular groove design, along with a semicircle porcelain ring wiring,Avoid stranded wire scratches and strand jumps caused by wind resistance during high-speed rotation.
- 4.Spindle lubrication: butter lubrication (Disadvantages of oil lubrication: the oil's temperature increases while high-speed operation , and the oil mist will concentrate into beads on the wall , falling to the reel and pollute the conductor, cause blister when conduct insulating)
- 5.Security protection: If the door contact or lifting limits is not in place, internal and external wire cutting off error display in the touch screen with automatic alarm or can't start.
- 6.Spindle and aluminum plate: after high-speed dynamic balance processing; noise less than 75 dB
- 7.Electrical control: user-friendly touch screen interface operation, control by the PLC programmer + inverter
- 8.Flyer Bow use Japan imported SK5 material, with heat treatment and hard chroming
- 9.Transmission system: drive with synchronous belts , laying accurate, no internal lubrication position, no waste products effect by refueling and machine cleaning
- 10.Pitch Change : easy to operate, just change the capstan wheel according to the pitch sheet
- 11.Compression device: With internal secondary compression devices to ensure the roundness of the conductor after stranding, guarantee the product characteristics of thin-walled insulated wires, and effectively reduce the loss of insulating materials

➤ **(Capstan wheel change pitch)Main performance parameters**

1. Application: stranding of ultra-fine wire conductors such as aerospace, medical equipment, mobile phones, notebook computers, etc. (over seven strands of alloy wire, tinned wire, silver-plated wire, enameled wire, etc.).
2. Mono-filament diameter range: $\varphi 0.05 \sim \varphi 0.28\text{mm}$
3. Twisted wire diameter range: $\varphi 0.15 \sim \varphi 0.90\text{mm}$
4. Stranded cross-sectional area: $0.0137 \sim 0.45\text{mm}^2$
5. Spool specifications: **$\varphi 300\text{mm} \times 160\text{mm} \times \varphi 30\text{mm}$ (or customize)**
6. Normal production Speed:3000RPM(6000TPM), speed varied due to wire diameter
7. Cable laying: $\varphi 15\text{mm}$ light rod bearing type ,rolling lay length and distance can be accurately adjusted
8. Strand lay length: $1.6 \sim 21.6 \text{ mm}$
9. Main motor: 3.7KW AC motor + inverter
10. Load: about 40Kg



11. Stranding direction: free option to S / Z, pull the switch bar to change the stranding direction, easy operation
12. Brake: With electromagnetic brakes, can achieve automatic braking when internal /external wire cutting off and reach meters
13. Tension control: magnetic clutch control taking up tension, by the PLC program controller automatically monitor and adjust the tension, keep the tension constant
14. Machine drive bearings: spindle with Sweden SKF bearings , the others with Japan NSK bearings
15. Synchronous belt: import from US
16. Spool loading/unloading : Electric pump hydraulic lifting
17. Spindle lubrication: butter lubrication
18. Noise index: less than 75dB
19. Machine size (mm): 2300L × 1100W × 1300H
20. Weight: 1600 Kg
21. Coating: RAL5015 light blue (can be customization according to customer requirements)
22. Packing: waterproof simple packaging
23. Direction: from right to left, i.e, facing to the front door, pay-off on the right (can be customize)
24. Body and door seal: plastic seal
25. Spindle bearing Seal: Mechanical oil retaining ring

➤ **Mechanical Performance**

1. Body structure:

1) Material: low carbon steel welded together.

2) Structure: the body by annealing and aging, to eliminate internal stress, and then boring by a precision boring machine to forming a molding.

2. Bunching Entry part:

1) Bunching Entry position: facing to the front door, at the right side of the machine (can be customization according to customer requirements to change to the left side).

2) Bunching Entry Mode : from the pay-off device through the disconnection sensing area, first to the total sub-line board (sub-hole by 1 +6 +12 + ... distribution), through first pressure mold, then the second Pressure mold, after entering the right spindle within the wire guide wheel. From the aluminum arch with porcelain ring and then into the left spindle within the wire guide wheel, and then through the center corner's guide wheel to the leading wheel, Final to the aligner's guide wheel to cable laying (see wire bunching entry pattern diagram)

3. Spindle:

1) Material: 40Cr steel forging after quenching and tempering treatment.

2) Accuracy: The shaft core outer face diameter and the bearing end face are ground to ensure concentricity and verticality with the axis.

3) Dynamic balance: Standard of G2.5

4. Aluminum plate:

1) Material: ZL104

2) Accuracy: All end faces are positioned relative to the locating holes

3) Dynamic balance: Accuracy of G2.5

5. Flyer Bow



- 1)Material: Japan imported SK5.
- 2)Shape: special appearance, reduce the wind resistance.
- 3)Weight tolerance : less than 0.03 grams per pair
- 6.Transmission part: with imported synchronous belt drive, laying length accurate
- 7.Wire entry wheel:
 - 1)Material: # 45 steel finished with heat treatment HRC30-40.
 - 2)Hard chrome plated on the surface, not easy to wear
- 8.Spindle housing:
 - 1)Material: Alloy cast iron.
 - 2)Processing: CNC machine tooling
 - 3)Accuracy: one processing hole end molding, to ensure concentricity.
- 9.Spindle bearing lubrication system:
 - 1)Lubrication method: butter lubrication
 - 2)Butter Model: LGMT2 SKF grease

Flange (φD)	Bare Hole(φd)	Outer Length (L1)	Traverse (L2)	Position Hole	PCD
300	30	160	130	Φ15	80

- 3)Sealing method: mechanical oil retaining ring, keep the machine clean inside
- 10.Take up:Tensile tension control: through the magnetic clutch control thread tension, by the PLC program controller automatically monitor and adjust the tension, keep tension constant
- 11.Traverse.Special Bi-direction traverse, φ15mm polish rod bearing type, traverse width and row space can be accurately adjusted
- 12.Pool Size:
- 13.Dynamic power : 1.7KW
- 14.Installed power : 3.7KW

➤ **Detail Specification:**

Description	Model	Origin
1.Host Motor	3.7KW-4P 380V 50Hz	SIEMENS
2.Inverter	3.7KW	INOVANCE
3.PLC Programmer	32MR	INOVANCE
4.PLC Expander	VB-3A	INOVANCE
5.Touch Screen	7 inches RGB	WEINVIEW
6.Electromagnetic Brake	6KG	TAIWAN
7.Magnetic Clutch	0.6kgf	TAIWAN
8.Spindle Bearings	1SET	SWEDEN SKF
Other Bearings	1SET	JAPAN NSK
9.Timing Belt	1SET	US GATES
10.Cable Laying Device	GP15(Special bi-direction)	SHANXI Tian Xiang
11.Manual hydraulic pump	10T	TAIWAN
12.Tension Controller	WLK-1A	TAIWAN
13.Bow	1SET	Japan
14. Body	1SET	Self-processing



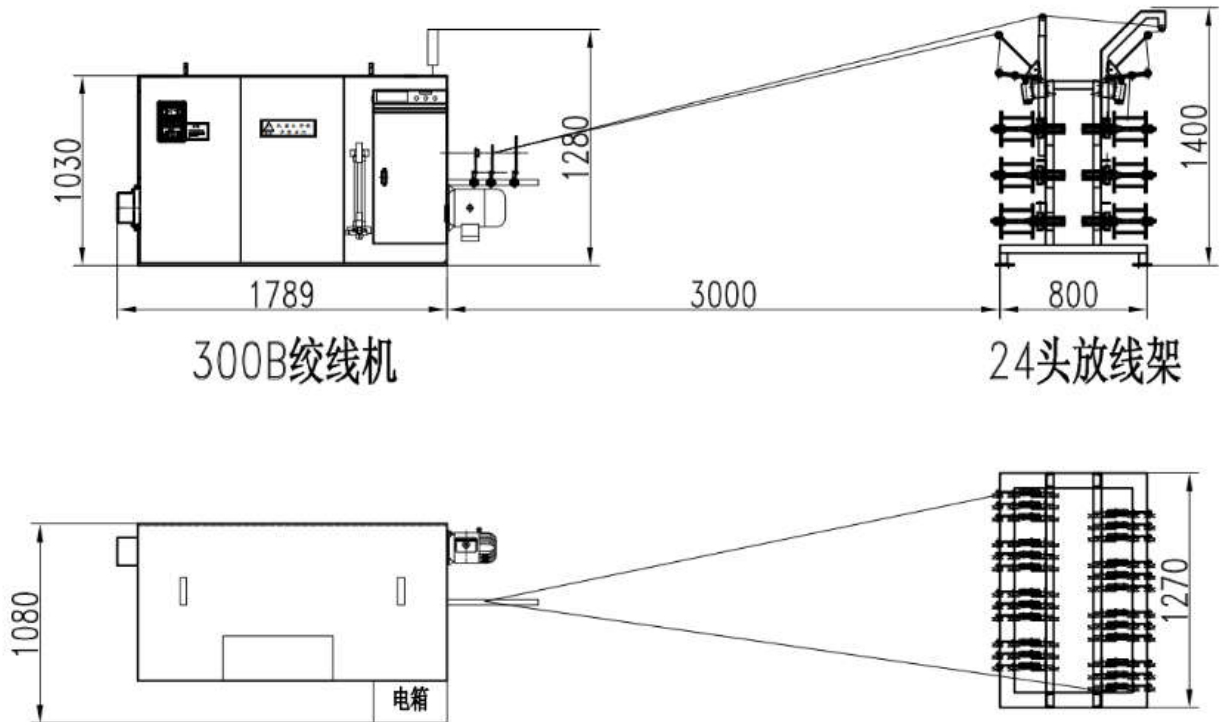
15. Spindle	2pcs	Self-processing
16. Aluminum Tray	2pcs	Self-processing
17. Timing Pulley	1SET	Wu Xi
18. Bearing Housings	1SET	Self-processing
19. Disc	2pcs	Self-processing
20. Transmission Shaft	1pcs	Subcontracting
21. Leading Wheel	1SET	Self-processing with hard chrome plating
22. Wire guide wheel	6pcs	Self-processing with hard chrome plating

➤ **180 Passive Pay-offs:**

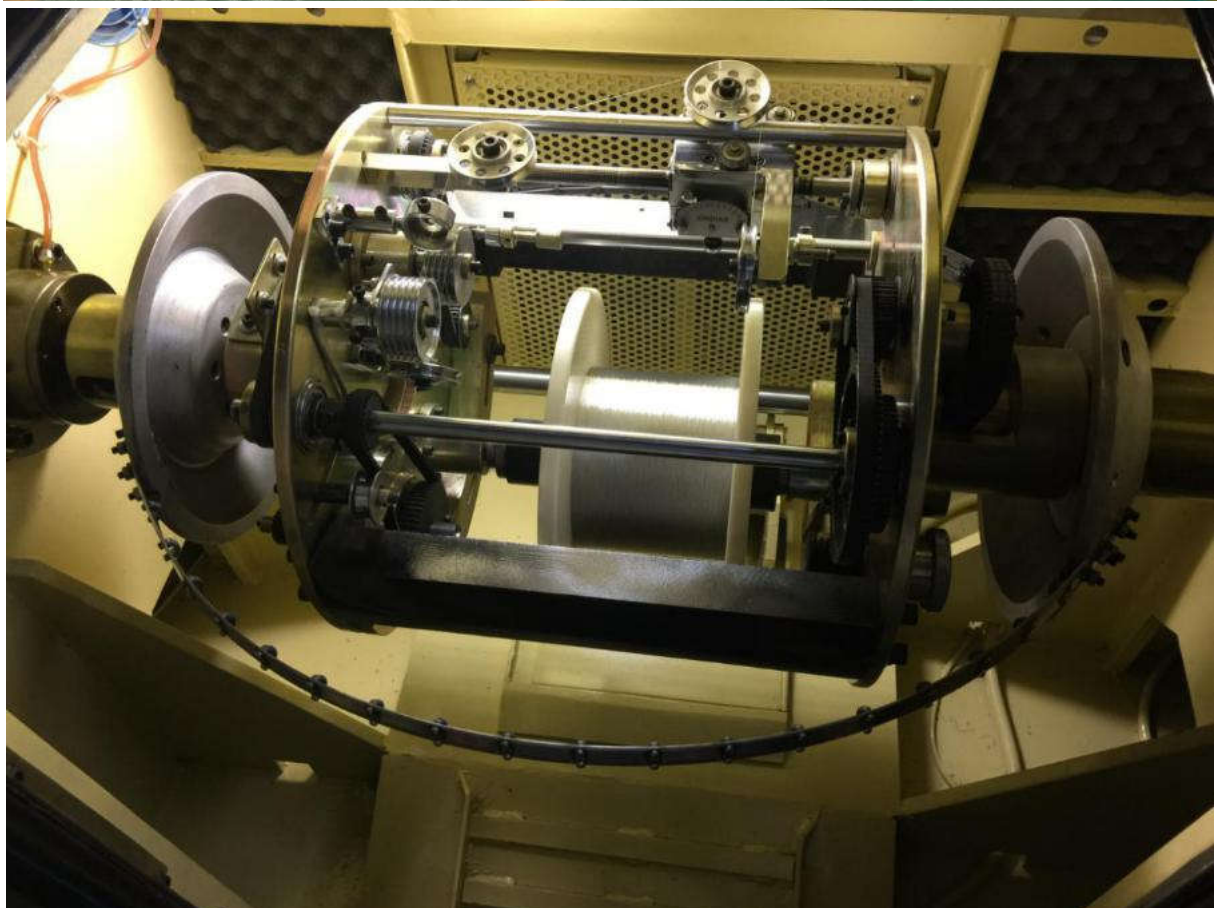
1. Spool size: PND120
2. Wire diameter: 0.05-0.12mm
3. Head: Heads/Set
4. Tension: Spring tension device
5. Brake: belt friction auto stop when wire cut off
6. Capacity: 5KG per spindle
7. Oblique fast nut

➤ **Spare parts sheet**

No.	Description	Model	Qty	Remark
1	Spindle guide wheel	(with Bearings)	1SET	
2	Loops in Bow	Bilateral porcelain ring	3pcs	
3	Split plate porcelain ring	Φ4.0	3pcs	
4	Stranded Die	Client provide		
5-7	Timing belt		1pcs	
8	Spool Top sleeve	According to reel drawings	1SET	
9	SKF Butter	LGMT2/1	1Bottle	1KG
10	Grease gun		1pcs	
11	Tool	With hex wrench, open wrench and etc	1SET	
12	Operating instructions		1SET	
13	Electrical Schematic		1SET	
14	Inverter manual		1pcs	



序号 Serial No.	绞距轮底径 Bottom Dia of Pitch Wheel	A传动绞距 A Drive Pitch	B传动绞距 B Drive Pitch
1	∅17.0	1.6	6.1
2	∅19.0	1.8	6.8
3	∅21.2	2.0	7.6
4	∅25.4	2.4	9.2
5	∅29.8	2.8	10.7
6	∅34.0	3.2	12.2
7	∅38.0	3.6	13.6
8	∅42.6	4.0	15.3
9	∅49.0	4.6	17.6
10	∅53.2	5.0	19.1
11	∅57.6	5.4	20.7
12	∅60.3	5.7	21.6





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- 3.Wiring system: Use the latest structure, the stranded conductor from the spindle wheel directly to the flyer bow, (with) a unique semi-circular groove design, along with a semicircle porcelain ring wiring,Avoid stranded wire scratches and strand jumps caused by wind resistance during high-speed rotation.
- 4.Spindle lubrication: butter lubrication (Disadvantages of oil lubrication: the oil's temperature increases while high-speed operation , and the oil mist will concentrate into beads on the wall , falling to the reel and pollute the conductor, cause blister when conduct insulating)
- 5.Security protection: If the door contact or lifting limits is not in place, internal and external wire cutting off error display in the touch screen with automatic alarm or can't start.
- 6.Spindle and aluminum plate: after high-speed dynamic balance processing; noise less than 80dB
- 7.Electrical control: user-friendly touch screen interface operation, control by the PLC programmer + inverter
- 8.Flyer Bow use Japan imported SK5 material, with heat treatment and hard chroming
- 9.Transmission system: drive with synchronous belts , laying accurate, no internal lubrication position, no waste products effect by refueling and machine cleaning
- 10.Pitch Change : easy to operate, just change the capstan wheel according to the pitch sheet
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- 7.Cable laying: $\varphi 15\text{mm}$ light rod bearing type ,rolling lay length and distance can be accurately adjusted
- 8.Strand lay length: 8 ~ 39.5 mm
- 9.Main motor: 3.7KW AC motor + inverter
- 10.Load: about 40Kg



- 11.Stranding direction: free option to S / Z, pull the switch bar to change the stranding direction,easy operation
- 12.Brake: With electromagnetic brakes, can achieve automatic braking when internal /external wire cutting off and reach meters
- 13.Tension control: magnetic clutch control taking up tension, by the PLC program controller automatically monitor and adjust the tension, keep the tension constant
- 14.Machine drive bearings: spindle with Sweden SKF bearings , the others with Japan NSK bearings
- 15.Synchronous belt: import from US
- 16.Spool loading/unloading : Electric pump hydraulic lifting
- 17.Spindle lubrication: butter lubrication
- 18.Noise index: less than 75dB
- 19.Machine size (mm): 2300L × 1100W × 1300H
- 20.Weight: 1600 Kg
- 21.Coating: RAL5015 light blue (can be customization according to customer requirements)
- 22.Packing: waterproof simple packaging
- 23.Direction: from right to left, i.e, facing to the front door,pay-off on the right (can be customize)
- 24.Body and door seal: plastic seal
- 25.Spindle bearing Seal: Mechanical oil retaining ring

➤ **Mechanical Performance**

1.Body structure:

1)Material: low carbon steel welded together.

2)Structure: the body by annealing and aging, to eliminate internal stress, and then boring by a precision boring machine to forming a molding.

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1)Material: ZL104

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5.Flyer Bow



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- 2)Shape: special appearance, reduce the wind resistance.
- 3)Weight tolerance : less than 0.03 grams per pair
- 6.Transmission part: with imported synchronous belt drive, laying length accurate
- 7.Wire entry wheel:
 - 1)Material: # 45 steel finished with heat treatment HRC30-40.
 - 2)Hard chrome plated on the surface, not easy to wear
- 8.Spindle housing:
 - 1)Material: Alloy cast iron.
 - 2)Processing: CNC machine tooling
 - 3)Accuracy: one processing hole end molding, to ensure concentricity.
- 9.Spindle bearing lubrication system:
 - 1)Lubrication method: butter lubrication
 - 2)Butter Model: LGMT2 SKF grease
 - 3)Sealing method: mechanical oil retaining ring, keep the machine clean inside
- 10.Take up:Tensile tension control: through the magnetic clutch control thread tension, by the PLC program controller automatically monitor and adjust the tension, keep tension constant
- 11.Traverse.Special Bi-direction traverse, ϕ 15mm polish rod bearing type, traverse width and row space can be accurately adjusted
- 12.Pool Size:
- 13.Dynamic power : 1.7KW
- 14.Installed power : 3.7KW

Flange (ϕ D)	Bare Hole (ϕ d)	Outer Length (L1)	Traverse (L2)	Position Hole	PCD
300	30	160	130	15	80

➤ **Detail Specification:**

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2.Inverter	3.7KW	INOVANCE
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7.Magnetic Clutch	0.6kgf	TAIWAN
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Other Bearings	1SET	JAPAN NSK
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13.Bow	1SET	Japan
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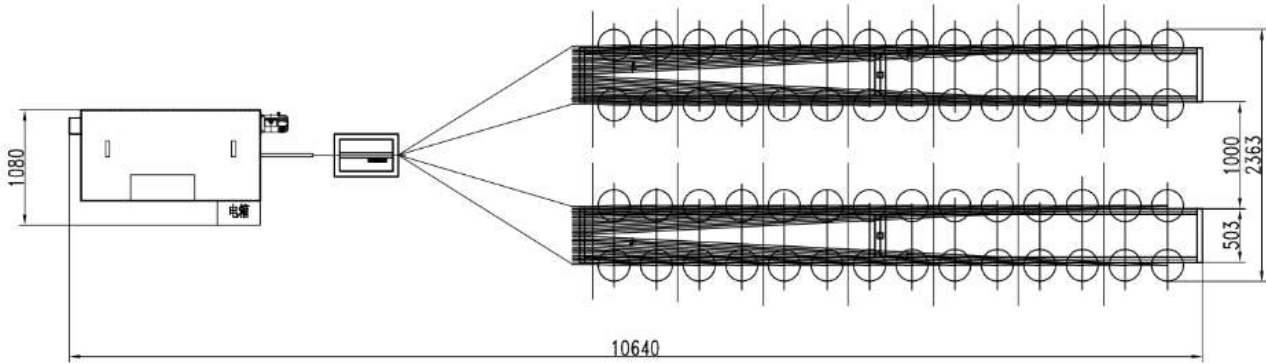
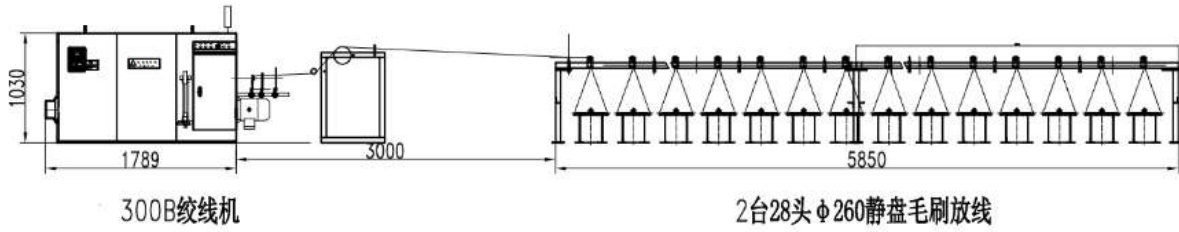
15. Spindle	2pcs	Self-processing
16. Aluminum Tray	2pcs	Self-processing
17. Timing Pulley	1SET	Wu Xi
18. Bearing Housings	1SET	Self-processing
19. Disc	2pcs	Self-processing
20. Transmission Shaft	1pcs	Subcontracting
21. Leading Wheel	1SET	Self-processing with hard chrome plating
22. Wire guide wheel	6pcs	Self-processing with hard chrome plating

➤ **260 static disc brush tension pay-off specification:**

1. Spool size: $\Phi 260 \times \phi 125 \times 270$ fine wire drawing spool
2. wire range: $\Phi 0.05 \sim \Phi 0.10$ mm
3. No. of heads: Heads/Set * Set
4. Tension control: Brush tension control

➤ **Spare parts sheet**

No.	Description	Model	Qty	Remark
1	Spindle guide wheel	(with Bearings)	1SET	
2	Loops in Bow	Small half porcelain ring	3pcs	
3	Split plate porcelain ring	$\Phi 4.0$	3pcs	
4	Stranded Die	Client provide		
5-7	Timing belt		1pcs	
8	Spool Top sleeve	According to reel drawings	1SET	
9	SKF Butter	LGMT2/1	1Bottle	1KG
10	Grease gun		1pcs	
11	Tool	With hex wrench, open wrench and etc	1SET	
12	Operating instructions		1SET	
13	Electrical Schematic		1SET	
14	Inverter manual		1pcs	



序号 Serial No.	绞距轮底径 Bottom Dia of Pitch Wheel	A传动绞距 A Drive Pitch	B传动绞距 B Drive Pitch
1	ϕ 32.0	8.0	19.1
2	ϕ 36.0	9.0	21.5
3	ϕ 42.6	10.7	25.4
4	ϕ 48.0	12.0	28.6
5	ϕ 53.2	13.3	31.7
6	ϕ 58.0	14.6	34.6
7	ϕ 66.3	16.6	39.5



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